

# CURRICULUM VITAE: YUE SUN

Harvard University  
School of Engineering and Applied Sciences  
Cambridge, MA 02138

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<http://sun-yue.com/>

## EDUCATION

Harvard University 2020 – present  
Ph.D. Student in Applied Mathematics  
Advisor: Professor Chris H. Rycroft

Harvard University 2018 – 2020  
M.E. in Computational Science and Engineering  
Advisor: Professor Chris H. Rycroft  
Thesis: *A lattice Boltzmann implementation of the reference map technique*

New York University Shanghai 2014 – 2018  
B.S. in Mathematics, *Magna Cum Laude*  
Minors in Interactive Media Arts, Urban Design and Architecture Studies

## RESEARCH INTERESTS

Broadly: computational fluid dynamics, scientific computing, computer graphics, physics-based animation  
Specifically: numerical methods for fluid–structure interaction, high performance computing in physical system simulation, reference map technique, lattice Boltzmann method

## PROFESSIONAL EXPERIENCE

Activision / Raven Software Middleton, WI  
*Technical Animation Intern, credit: “Call of Duty: Black Ops Cold War”* Summer 2020  
*Technical Animation Intern, credit: “Call of Duty: Modern Warfare”* Summer 2019

Pearl Studio (formerly Oriental DreamWorks) Shanghai, China  
*Production Education Intern* Summer 2016

## PRESENTATIONS

APS March Meeting, Virtual March 15-19, 2021  
Oral presentation: *A lattice Boltzmann based reference map technique for fluid–structure interaction*

Harvard IACS ComputeFest, Cambridge, MA January 21-24, 2020  
Workshop co-organizer: *Notebook to Cloud Workshops*

## TEACHING EXPERIENCE

Harvard University Teaching Fellow  
ES 123: Introduction to Fluid Mechanics and Transport Processes Spring 2020  
AM 205: Advanced Scientific Computing: Numerical Methods I (graduate) Fall 2019

New York University Shanghai  
SOCS-SHU 100: Public Speaking in a Leadership Context

Teaching Fellow  
Fall 2017

## AWARDS AND SCHOLARSHIPS

David B. Heller Innovation Fund Fellowship <i>Harvard John A. Paulson School Of Engineering and Applied Sciences</i>	2020 – 2021
Special Commendation Extraordinary Teaching in Extraordinary Times <i>Harvard College Office of Undergraduate Education</i>	2020
Certificate of Special Distinction in Teaching <i>Harvard Institute for Applied Computational Science</i>	2020
IACS Student Scholarship for Research <i>Harvard Institute for Applied Computational Science</i>	2019
<i>Phi Beta Kappa Society</i> <i>Beta Chapter of New York (New York University)</i>	2018
HiTime Global Scholar <i>New York University Shanghai</i>	2016 – 2017
Deans' Undergraduate Research Fund <i>New York University Shanghai</i>	2016

## SKILLS

*Languages:* C++, Python, L<sup>A</sup>T<sub>E</sub>X, MATLAB, JavaScript, C#, Processing

*Applications:* Maya, Unity3D, Arduino, Adobe After Effects / Premiere / Photoshop

*Technologies:* OpenMP, Maya API, OpenGL, p5.js, Git, Perforce, gnuplot, PySide, PS4 Dev Tools